types mentioned is used considerably in America but rarely in England. In the latter country spinal anesthesia for major rectal work has been used consistently since the surgeon, A. E. Barker, introduced it from Germany; and stovaine which he used, has never been supplanted. In combination with nitrous oxide and oxygen it is the favorite method in major surgery of the lower bowel. M. S. Woolf, San Francisco.

## Surgery

reatment of Osteomyelitis of the Jaw-Osteomyelitis, more properly termed necrosis, of the jaw is an exceedingly dangerous condition and demands infinite patience in its treatment.

In the acute state, too radical surgery in removing bone and curetting is most likely to result in a septicemia and possibly death, for new blood channels are thereby opened and the infection, as a rule streptococci predominating, gains entrance to the general circulation. Drainage of the infected area is the only justifiable treatment at this stage. It should be obtained preferably by gently clearing out the dental pocket; or, second choice, by buccal approach to the infected area or, if necessary, skin incision and opening of the periosteum laterally, or at the lower border. Mouth wash and bi-daily gentle manipulation to insure the proper drainage are essential. X-ray to show the presence or absence of necrosis is of no value under approximately ten days, and will do harm at this stage by lowering the local tissue resistance.

In the chronic stage, the basic procedures are the gradual removal of sequestra performed as spontaneous separation occurs, and avoidance of disturbance to the periosteum and the new bone which develops from the live bone cells on this layer. The diseased bone must be left a sufficient length of time, approximately ninety days, in order to retain the normal contour of the mandible. Simultaneously the new bone is forming at the periphery and gradual extrusion of the sequestra to the center. from which they may be removed without harm, ensues. The teeth, especially when only partially developed, should be left in place, for they will respectively become fixed and continue to function or grow to function. During this period, strict attention must be paid to the mouth hygiene and, if necessary, dental or interdental splinting employed, to hold the proper occlusion of the teeth of the opposite side of the mandible and the opposing teeth above.

Osteomyelitis of the jaw then, in the acute stage, should be treated by adequate drainage only, and this obtained by as little trauma as possible. In the chronic stage, time should be allowed for the new bone to develop so as to assume the form of the necrosed bone, and the dead bone to be extruded gradually from the center as sufficient separation occurs. As Blair 1 has suggested, an Italian proverb, "He who goes slowly, goes safely; he who goes safely, goes surely," should be the dictum in treatment of osteomyelitis of the jaw.

> JOHN HOMER WOOLSEY, San Francisco.

#### **Tuberculosis**

Taccination in Tuberculosis—There is much evidence to show that resistance against tuberculosis is developed in the children of tuberculous parents. Like the phenomenon of evolution, the fact is clear, although the mode of operation may be vague. In proof of the development of resistance to tuberculosis, there are facts not only supported by living material, but incontrovertible evidence is also offered by vast autopsy studies such as those by Opie, 1 Robertson, 2 and many others.

A disease implanting itself upon virgin soil reaps a terrible harvest. The opposite is true, however, in communities where the disease has become endemic. Epidemiological studies, notably those of Topley 3 and others in England, and Flexner 4 and his associates in this country, have shown that the factors of resistance and disease incidence among exposed and unexposed groups may be paralleled in clinical practice. The statisticians have added further important evidence of a definite relationship existing between exposure to infections such as tuberculosis, and the morbidity and mortality rates in groups of population. Dublin 5 has pointed out the relatively lower rate for tuberculosis in children of the industrial as compared with the general population. Significantly, too, he has commented on the greater prevalence of the disease in the industrial group. It is clear, from whatever angle we would approach the subject, that tuberculization leads to a lessened incidence in the offspring and, more important still, to a favorable progress and outcome of the disease in those who may have become infected.

One of the most striking studies in recent years, reported by Drolet,6 has adduced evidence of fundamental interest to the student of chest diseases as well as to the general practitioner. It was found that exposure to tuberculosis was reported more frequently among nontuberculous patients than among those who were tuberculous. More than twice as many gave a history of tuberculosis in one or both parents among 2509 nontuberculous persons as compared with a group of 2785 tuberculous patients among whom only 14 per cent reported a parental history of infection. Among 5852 persons with a negative history of tuberculosis in parents, 59 per cent were found to be tuberculous, whereas among 1577 persons with a positive parental history, 34 per cent were tuberculous. Making due allowance for the smaller number of subjects in this last group, the difference appeared, none the less, striking enough to warrant the conclusion that the incidence of tuberculosis was inversely proportional to the amount of parental infection. Furthermore, evidence was adduced to show a greater tendency to recovery in patients with tuberculous parents than in members of families attacked by the disease for the first time.

In the light of the foregoing observations and

<sup>1.</sup> Blair, V. P., and Brown: Osteomyelitis of the Jaw, Surg. Clin. N. A., 5, 1925, pp. 1413-36.

<sup>1.</sup> Opie, E. L.: Am. Rev. of Tuberc., 1924, 10, 249; Bull. N. Y. Tuberc. Assn., March and April, 1924, p. 3.
2. Robertson: Tr. Twentieth Annual Meeting, Nat. Tuberc. Assn., Atlanta, May, 1924.
3. Topley, W. W.: Lancet, 1919, 2, 1, 45, 91.
4. Flexner, S. et al.: Am. J. Med. Soc., 1926, 171, 469; ibid, 171, 625; Trans. Cong. Am. Phys. and Surg., 1919, 11, 56; J. Exp. Med. 1922-26 (numerous papers).
5. Dublin, L.: Tr. Nineteenth Meeting Nat. Tuberc. Assn., 1923, June 20, p. 18.
6. Drolet, G. J.: Am. Rev. of Tuberc., 1924, 10, 280.

much more material which cannot be discussed for lack of space, it might be of interest to analyze critically the widely heralded and exploited recent work of Calmette and his associates.7 Vaccination of infants with the strain of tubercle bacilli known as BCG (Bacillus-Calmette-Guérin), according to these investigators, protects against infection with tuberculosis. It is stated that 25 per cent of unvaccinated "control" babies succumbed to the disease within twelve months, whereas the vaccinated babies failed to contract the disease for a year or sometimes longer. Obviously, while the work may be correct in principle or theory, many years must elapse before an accurate interpretation of the data may be safely made. To offset such a conclusion, however correct this might prove to be, there is the added fact that the type of experimental material does not permit one to arrive at a decisive conclusion. In the first place, it is impossible to gauge with any degree of accuracy the results of vaccination in a group of persons exposed to conditions which are not only likely to but are known to favor the development of resistance to the disease in question. This is a point to be kept distinct from the factor that is being investigated experimentally on a clinical scale. Furthermore there is no reliable method available for estimating the number of children likely to escape tuberculosis in such a group or in an unvaccinated group. The figures of Drolet and others already mentioned should give one pause. Finally the question arises, how are we to be certain of an immunity attributable to vaccination, in the face of so many instances of tuberculosis (lymph glands, etc.), occurring in children in whom symptoms cannot be evaluated clinically, and in whom pathological changes cannot be demonstrated satisfactorily. The protection claimed by the French workers in the reports to date might just as well be laid to the individual differences in resistance of the children, such that an infection, instead of occurring within twelve months after exposure, happened to take place later.

Viewing the studies with BCG open-mindedly and not being averse to the acceptance of something new, one should, however, be willing to examine the data in terms of our knowledge of immunity, and of biological phenomena of infectious disease. To this extent it appears that the reports of vaccination against tuberculosis are, to say the least, premature and unsupported by convincing evidence.

A point of more than passing interest, too, is one regarding the supposed innocuous nature of the BCG organism which, it is claimed, cannot infect, even though it be injected in the living state. To accept this idea with complete nonchalance is difficult. Experience of laboratory workers would tend to make one hesitate before using living bacilli for injection into humans, however avirulent and innocent the organisms may appear to be. Not infrequently strains of tubercle bacilli, plague organisms (B. pestis) and many other pathogenic species, unaccountably lose their virulence for the experimental animal and in an equally mysterious fashion suddenly regain infectious properties. These occurrences, despite a fixed technique of artificial cultiva-

tion in the test-tube or inoculation into animals, tend to refute the assumption that pathogenic bacteria are always tractable and well trained. The writer has had such experiences while working with plague and tuberculosis and can confirm the experiences reported by others.

As to the outlook for artificial immunization and possible therapy in tuberculosis, experimental evidence suggests that neither the bacillary element alone nor the toxin element by itself will give us the key. Attention might well be focused upon the use of both substances in the form of specially prepared filtrates (toxins) and tuberculin fractions, representing the bacterial substance as well as the toxin produced by the organism. Clinical experience with the disease supports the possible validity of such a method of attack.

The purport of this discussion is a plea for the exercise of some restraint, and a more critical evaluation of clinical investigations, and of the more exalted studies, better called researches. In this way, perhaps, sensationalism will be put into the background and sound facts, compiled by careful and laborious and patient methods, will add irrefutable knowledge to the science and art of medicine. With John Hunter, let us not think so much as try.

Frederick Eberson, San Francisco.

The Free Professional Report Evil—Why a physician should be expected to look up past records of patients, compile reports therefrom, have the same typewritten, and forward to an insurance company or other organization or institution, and all without pay for his time used, energy expended, and professional opinion given, is a topic which is discussed by Dr. John V. Barrow of Los Angeles, in the communication which is here printed.

The points which he brings out are worthy of serious consideration not only by individual members of the profession, but by the officers of the component county medical associations. Members of the California Medical Association are invited to send to CALIFORNIA AND WESTERN MEDICINE, letters dealing with subjects such as this. Space will be given them in the "Medical Economics" or other columns.

Doctor Barrow's letter follows:

"Ever since medicine became a business, physicians have been imposed upon for free service by many who could well afford to pay for that service. Probably the most flagrant offenders are the life and other insurance companies, which are constantly demanding reports from physicians for the results of examinations and treatments given to patients, who are seeking either new insurance or reinstatement in old insurance.

"The insurance companies know that the physician cannot charge the patient for this service. They also know that the good-will of the patient may be sacrificed by the physician's refusal to give this service without charge or stint. The service requested is primarily to the insurance company, and not to the patient. It is intended to save the time and expense of a thorough check-up examination by the company. As a matter of fact the statement by a physician that he has treated the applicant for an illness in the past is no guarantee to the company that the disease in question has had any influence on the insurability of the applicant. The only true test of the applicant's physical condition is a thorough-going, searching examination at the time the insurance application is before the company.

"A better medical examination by the company would make for better insurance service and less risk to the company. It would be better business for the insurance

<sup>7.</sup> Calmette, A., and Guérin, C. et al.: Ann. de l'Inst. Past., 1926, 40, 89.

people and would not put them in the rôle of indigents, seeking gratuitous help from physicians.

"Any person or institution requesting a medical report should be ready to pay for that report and not make it a demand on charity. It is to be hoped that physicians will look more to their professional business, and realize that socialized medicine is being forced upon us by corporations, including our own state; and not by a sick public whom it is our duty and privilege to treat in a business way."

Improved Urethral Syringe (F. A. Van Buren, M. D., San Antonio, Texas)—Some years ago I devised a long, slender barrel syringe (Fig. 1) for treatment of the female urethra. This instrument became very popular and was useful to those doing gynecology and urology. It may be used also as a uterine syringe.



Fig. 1-Syringe with long, slender barrel

Recently I devised another model, for the female urethra and bladder only. It has a capacity of about 30 cc. of fluid, a longer curved conical tip reaching the bladder, and eccentrically placed so as not to interfere with a vaginal speculum if used. Slight pressure prevents the return of the liquid (Fig. 2).



Fig. 2-Syringe for female urethra and bladder

These syringes are always in working order; they have the nonfilling bulb, and are easily cleaned and sterilized. They are manufactured through the courtesy of Becton Dickinson & Company, makers of the "Asepto" line.

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Sanitation in Flooded Areas of Mississippi Valley-Reports that have been received by the journal indicate that the acute sanitary problems arising out of the flood in the lower Mississippi Valley are well in hand and that plans for the restoration of the refugees to their homes as the waters recede are under way. The authorized refugee camps in the state of Mississippi now contain, it is said, about half of the inhabitants of the overflowed districts. The rest are scattered in unauthorized camps, are being cared for by relatives or friends, or have accommodated themselves as best they could in their own homes or other buildings on their premises. The authorized camps have been erected and are being policed by the national guard of the state. Sanitary control is under direction of the state health officer, acting in conjunction with the local health units The American Red Cross has furnished services and supplies without stint. The people of the several communities in which these camps are located have united as a unit to support them. Few cases of acute communicable diseases have been brought in with the refugees, and in no case has there been any spread of infection. Practically all the refugees in these camps have been vaccinated against typhoid, probably more than half of them have been vaccinated against smallpox, and some have been vaccinated against diphtheria. Quinin has been freely used to cure and prevent malaria. The sickness rate in these camps compares favorably with the sickness rate in the average community under normal conditions. The outstanding sanitary lesson of the flood is the necessity for full-time health officers in states and counties, with adequate health organizations behind them. If the flood results, as well it may, in the establishment of that system of health administration, some permanent benefit will have come out of the general catastrophe.

# CALIFORNIA MEDICAL ASSOCIATION

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#### FRESNO COUNTY

The regular monthly meeting of the Fresno County Medical Society convened at the Hotel Californian, Fresno, Tuesday evening, May 3. The meeting was unusually long, but a most interesting and enthusiastic one; attended by over fifty members of the society. Dr. D. T. Aller, president, presided.

The regular routine of business was suspended in order to hear from Chief of Police W. G. Walker and Captain of Police John P. Murphy in regard to a subject of much interest and importance to the doctors practicing in the city of Fresno. Congested parking conditions on the streets of Fresno have been for years an increasingly difficult problem of solution for the Police Traffic Department. In spite of these conditions the police department had made an exception in the matter of tagging the doctor's vehicle, as recognized by the various medical emblems-insignia and dash-plates obtainable through the police department. It has been found, however, that this special privilege granted the physician has been grossly abused by a few physicians who obtained duplicate plates for their second or family car; also by nurses, cultists, and dentists to whom this privilege was not extended. A police bulletin that became effective May 1st therefore

canceled all such privileges.

Chief of Police Walker outlined the necessity of the comparatively drastic bulletin, which in brief is a final effort to correct this prevailing evil, and to make possible a new method of restoring the parking privilege to the doctor only. It is the plan of the Police Department to issue a new emblem only to legitimate physicians and surgeons who are first approved by the Fresno County Medical Society. It was suggested by the Police Department that a committee be appointed by the society to cooperate with the Police Department in the matter of choosing the emblem and in granting permission for the emblem. The suggestion was approved by the society, and the sincere appreciation of the courtesy extended the society expressed to the Police Department,

### Resolution Adopted by the Society

Whereas, It was the will of the Almighty to remove from this earth, Benjamin F. Walker, son of our honored and esteemed Dr. J. R. Walker and nephew of Dr. George Walker; and

Whereas, Benjamin F. Walker was known to be a young man of sterling character and great promise in his chosen line of endeavors; and

Whereas, This society feels that the entire community has suffered the loss of a good citizen and faithful son, be it

Resolved, That the Fresno County Medical Association through its officers and governors extend to the bereaved family their heartfelt sympathy; and be it further

Resolved, That a copy of these resolutions be sent the bereaved family and a copy spread upon the minutes of this Association.

> THOMAS F. MADDEN D. I. Aller C. O. MITCHELL.

Dr. Thomas F. Madden, who attended the Los Angeles state convention, gave a brief report of the convention. Doctor Madden stressed the advisability of electing delegates and alternates for future meetings whom we were certain would attend and take an active part in the meetings.

#### Report of Committees

Committee on Health Examinations of Preschool Children. Gentlemen: At a joint meeting of your Board of Governors with the Fresno County Health Officers, held April 19, 1927, with the president, D. I. Aller, presiding,